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IL-19

Catalog # PVGS1146

Product Information

Primary Accession	Q9UHD0
Species	Human
Sequence	Leu25-Ala177 (Phe175Ser)
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	
Biological Activity	Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using human IL-20Rα and human IL-20Rβ co-transfected murine BaF3 pro-B cells is less than 1.5 ng/ml, corresponding to a specific activity of > 6.7×10^5 IU/mg.
Expression System	E. coli
Theoretical Molecular Weight	17.9 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in 100 mM HAC up to 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	29949
Other Names	Interleukin-19, IL-19, Melanoma differentiation-associated protein-like protein, NG.1, IL19, ZMDA1
Target Background	Interleukin-19 (IL-19) is a cytokine belonging to the interleukin family. Structurally, IL-19 is grouped into the IL-10 sub-family, which also includes IL-20, IL-22, IL-24, and IL-26. In contrast to IL-10, which exists as a homodimer, IL-19 is stable and active as a monomer in vivo. IL-19 functions through the receptor complex composed of IL-20 Receptor α and IL-20 Receptor β, which is also utilized by IL-20 and IL-24. IL-19 is produced by active monocytes and stimulated synergistically by IL-17 and IL-13. The functions of IL-19 are to promote the development and function of Th2 cells and to enhance the production of Th2 cytokines. IL-19 is implicated in aging, vascular disease, Type I diabetes, and rheumatoid arthritis.

Protein Information

Name	IL19
Synonyms	ZMDA1
Function	Cytokine that functions as an anti-inflammatory and proangiogenic factor (PubMed:34932373). Polarizes adaptive immunity to an anti-inflammatory phenotype through induction of T-helper 2 responses by both down-regulation of IFN-gamma and up-regulation of IL4 and IL13 (PubMed:16365913). Produced by osteocytes, stimulates granulopoiesis and neutrophil formation (By similarity). Exerts its biological effect through a receptor complex consisting of a heterodimer of IL20RA and IL20RB (PubMed:12351624). In turn, activates the Janus kinase (JAK) and signal transducer and activator of transcription (STAT) pathway, and importantly, STAT3 (PubMed:11564763).
Cellular Location	Secreted.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.